

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: August 19, 2003, 15:22:35 ; Search time 58 Seconds
(without alignments)
1709.818 Million cell updates/sec

Title: US-09-494-297-2
Perfect score: 3945
Sequence: 1 MKKTRFPNKLTNTQTVLS.....IAGISLGICWGIHTRIRKHD 757

Scoring table:
BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 492763 seqs, 131003257 residues
Total number of hits satisfying chosen parameters: 492763

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

Published Applications_AA:*

- 1: /cgn2_6/ptodata/2/pubppaa/US07_PUBCOMB.pep:*
- 2: /cgn2_6/ptodata/2/pubppaa/PCRT_NEW_PUB.pep:*
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- 6: /cgn2_6/ptodata/2/pubppaa/PCRTUS_PUBCOMB.pep:*
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- 9: /cgn2_6/ptodata/2/pubppaa/US09A_PUBCOMB.pep:*
- 10: /cgn2_6/ptodata/2/pubppaa/US09B_PUBCOMB.pep:*
- 11: /cgn2_6/ptodata/2/pubppaa/US09C_PUBCOMB.pep:*
- 12: /cgn2_6/ptodata/2/pubppaa/US09_NEW_PUB.pep:*
- 13: /cgn2_6/ptodata/2/pubppaa/US10A_PUBCOMB.pep:*
- 14: /cgn2_6/ptodata/2/pubppaa/US10B_PUBCOMB.pep:*
- 15: /cgn2_6/ptodata/2/pubppaa/US10C_PUBCOMB.pep:*
- 16: /cgn2_6/ptodata/2/pubppaa/US10_NEW_PUB.pep:*
- 17: /cgn2_6/ptodata/2/pubppaa/US60_NEW_PUB.pep:*
- 18: /cgn2_6/ptodata/2/pubppaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	152	3.9	1849	15 US-10-242-056-49	Sequence 49, Appl
2	152	3.9	2516	9 US-09-817-514A-2	Sequence 2, Appl
3	152	3.9	2516	15 US-10-242-056-47	Sequence 47, Appl
4	148	3.8	1183	10 US-09-870-759-45	Sequence 45, Appl
5	147	3.7	1349	9 US-09-815-242-5898	Sequence 5898, Ap
6	147	3.7	1349	9 US-09-815-242-13137	Sequence 13137, A
7	144.5	3.6	2344	9 US-09-815-242-12713	Sequence 12713, A
8	141	3.6	2297	15 US-10-245-802-20	Sequence 20, Appl
9	139.5	3.5	1167	9 US-09-815-242-11522	Sequence 11522, A
10	139	3.5	2366	15 US-10-011-366-10	Sequence 10, Appl
11	136.5	3.5	4590	15 US-10-160-758-13	Sequence 13, Appl
12	136.5	3.5	4590	15 US-10-160-758-14	Sequence 14, Appl
13	136.5	3.5	4590	15 US-10-060-036-157	Sequence 157, App
14	135	3.4	1228	10 US-09-117-447-2	Sequence 2, Appl
15	133.5	3.4	871	10 US-09-858-525A-2	Sequence 2, Appl

16	131.5	3.3	921	10 US-09-117-447-6	Sequence 6, Appl
17	131	3.3	2119	12 US-09-769-744A-28	Sequence 28, Appl
18	129.5	3.3	836	10 US-09-858-525A-10	Sequence 10, Appl
19	129.5	3.3	886	11 US-09-769-787-126	Sequence 126, Appl
20	129.5	3.3	3063	15 US-10-177-293-63	Sequence 63, Appl
21	128	3.2	665	11 US-09-769-787-127	Sequence 127, Appl
22	128	3.2	1375	9 US-09-740-274-4	Sequence 4, Appl
23	128	3.2	1394	11 US-09-839-996-2	Sequence 2, Appl
24	128	3.2	1394	15 US-10-080-505-2	Sequence 2, Appl
25	128	3.2	1395	15 US-10-080-505-7	Sequence 7, Appl
26	127.5	3.2	461	14 US-10-011-588-5	Sequence 5, Appl
27	126.5	3.2	691	9 US-09-815-242-12339	Sequence 12339, A
28	126.5	3.2	822	10 US-09-981-9008-9	Sequence 9, Appl
29	126.5	3.2	1434	15 US-10-080-505-9	Sequence 9, Appl
30	125.5	3.2	841	9 US-09-815-242-5779	Sequence 5779, Ap
31	125.5	3.2	841	9 US-09-815-242-12751	Sequence 12751, A
32	125	3.2	833	9 US-09-844-281-1	Sequence 1, Appl
33	124.5	3.2	26926	10 US-09-759-5088-2	Sequence 2, Appl
34	124	3.1	1300	9 US-09-815-242-4903	Sequence 4903, Ap
35	124	3.1	1300	9 US-09-815-242-10906	Sequence 10906, A
36	123.5	3.1	3063	12 US-10-301-822-26	Sequence 26, Appl
37	123.5	3.1	3063	15 US-10-177-293-61	Sequence 61, Appl
38	122.5	3.1	722	9 US-09-815-242-10796	Sequence 10796, A
39	122.5	3.1	2383	9 US-09-912-020-302	Sequence 302, App
40	122	3.1	663	9 US-09-815-242-5350	Sequence 5350, Ap
41	122	3.1	663	9 US-09-815-242-12138	Sequence 12138, A
42	121.5	3.1	437	11 US-09-910-346C-19	Sequence 19, Appl
43	121.5	3.1	448	9 US-09-288-326-7	Sequence 7, Appl
44	121.5	3.1	449	14 US-10-011-588-47	Sequence 47, Appl
45	121.5	3.1	870	9 US-09-815-242-5493	Sequence 5493, Ap

ALIGNMENTS

US-10-242-056-49
Sequence 49, Application US/10242056
Publication No. US20030113323A1

GENERAL INFORMATION:
APPLICANT: Ensign, Jerald C
APPLICANT: Bowen, David J
APPLICANT: Petell, James
APPLICANT: Fattig, Raymond
APPLICANT: Schoonover, Sue
APPLICANT: Hirsch-Constant, Richard
APPLICANT: Orr, Gregory L
APPLICANT: Merlo, Donald J
APPLICANT: Roberts, Jean L
APPLICANT: Rochelleau, Thomas A
TITLE OF INVENTION: Insecticidal Protein Toxins from
NUMBER OF SEQUENCES: 88
CORRESPONDENCE ADDRESS:
ADDRESS: DOWLANCO
STREET: 9330 Zionsville Road
CITY: Indianapolis
STATE: IN
COUNTRY: US
ZIP: 46268
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/242,056
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/063,615
FILING DATE: 18-MAY-1993
PRIOR APPLICATION DATA:

Qy 447 -----DFTTGEVKYTHIAGRDLFKYTVKPRDTP 475
Db 1290 SYQGFDTNNVRNNRAEDYEIPSSVSRKDYLGWDYLLSMVYNGDIPTINYKAASDL 1349
Qy 476 DTFLEKHKYIEKGY-----REKGAIEYSGLTETOLRAATOLAIYFFDSAELODKLKD 531
Db 1350 KIYISPKRIITHNGYEGOKRNQCNLMNKYKLGDKFIYVTSLGVPNNSSKLMFYPYQ 1409
Qy 532 YHFGDMNDSTLAAKILVEAODSNPQLTDLDFEIPNNK-----YQSLIGTQW----- 582
Db 1410 YSG-----NTSGLNGRLL--FHRDTTYP--SKVEAMIPGAKRSLTNQAAIGDDYATDSL 1461
Qy 583 -HPEDLVDIIMEDEKKEVI-----PYTHNLTL-----RKVTGLADRTDPE----- 626
Db 1462 NKPDOLKQYIMTDSKGTATVSGVEINTAISPAAKQOILYKAGKEQTFADKQVSIOP 1521
Qy 627 -----TELKNNKQELLSSQYVTKTKNLEF--KDGK-----ATINLKHG 662
Db 1522 SPSEFDMYOPNAEIDSGLNFTNNSASIDVTFEAFADERKLGYESFSIPVTLKYSTD 1581
Qy 663 ESLTLQGLPEGYSYLVKRETSDEGYKVKVNS-----QEVNATVSKTGITSDETLAFENKE 718
Db 1582 NALTLLHNENGAQTM-----QMOSTRRLNTLTPARQLVARAT--TGIDTILMETONIOE 1634
Qy 719 PVVPTGVQDKINGYALIVIGISLGWIG 747
Db 1635 P-----QLGKGFTATFTVIPPYNLSTHG 1656

RESULT 3
US-10-242-056-47

Sequence 47, Application US/10242056

Publication No. US20030113323A1

GENERAL INFORMATION:

APPLICANT: Ensign, Jerald C

APPLICANT: Bowen, David J

APPLICANT: Petell, James

APPLICANT: Fatly, Raymond

APPLICANT: Schoonover, Sue

APPLICANT: ffrench-Constant, Richard

APPLICANT: Orr, Gregory L

APPLICANT: Merlo, Donald J

APPLICANT: Roberts, Jean L

APPLICANT: Rochelleau, Thomas A

TITLE OF INVENTION: Insecticidal Protein Toxins from

NUMBER OF SEQUENCES: 88

CORRESPONDENCE ADDRESS:

ADDRESSEE: Dowelanco

STREET: 9330 Zionsville Road

CITY: Indianapolis

STATE: IN

COUNTRY: US

ZIP: 46268

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION NUMBER: US/10/242,056

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/063,615

FILING DATE: 18-MAY-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/395,497

FILING DATE: 28-FEB-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/007,255

FILING DATE: 06-NOV-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/608,423
FILING DATE: 28-FEB-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/705,484
FILING DATE: 28-AUG-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/743,699
FILING DATE: 06-NOV-1996
ATTORNEY/AGENT INFORMATION:
NAME: Borucki, Andrea T
REGISTRATION NUMBER: 33651
REFERENCE/DOCKET NUMBER: 50301E
TELECOMMUNICATION INFORMATION:
TELEPHONE: 317-337-4846
TELEFAX: 317-337-4847
INFORMATION FOR SEQ ID NO: 47:
SEQUENCE CHARACTERISTICS:
LENGTH: 2516 amino acids
TYPE: amino acids
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-10-242-056-47

Query Match 3.9%; Score 152; DB 15; Length 2516;
Best Local Similarity 18.3%; Pred. No. 0.021;
Matches 148; Conservative 120; Mismatches 287; Indels 254; Gaps 37;

Qy 157 AVMTNGHPQANGIMEGLEPNAIRVTOE-AWYYSD-----NAPISNDESEKRRSE 208
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Qy 209 SNLVS-----SOLSLMRQALKO-----LIDPMLA-----TKMKQYPPDPOL----- 246
Db 943 SAAISTYYIRQYAKAAAKIKSRDDLQYOLYLLIDNOVSAIAIKTTRIAEATA-SIQLVYNAL 1001
Qy 247 -SIFSEDDK-----DKYNGYQNLISGLVPTKPPTPGPPPPPOPTSVLI 295
Db 1002 ENVEBNANSVVISRQFFIDMKRYNKRYSTMAGVSQVLYPENYIDPTKRIQTKMMALL 1061
Qy 296 RKYA-----IGDYSKLEGATLOLTGDNVVSFOARV-----SSNDIGE 334
Db 1062 QSVSOSQLNADTVEDAFMSYLTSPFQVANLKVISAHYHNINNDGLTFIGLSETDAGEY 1121
Qy 335 -----RIELSDGTYTL-----ELNSPAG--YSIAPITFKYKAGVYIT-IDKQIE 379
Db 1122 YWRSVDHSHKENDGKFAANAMSEWHKIDCPINPYASTIRPYIK--SRLLYLLMLEQKEIT 1178
Qy 380 NPNEIYEPYVSEAVNDFE-----EFSVLTTON-----YAKF 411
Db 1179 KOTGNSKGYQOTENDRYELKLAHTRDGTWNTPTTPPVNKKISLEKLEKRRARGLYCAG 1238
Qy 412 YKARN-----KNGSSQVYVCFNADLKSPDSEDDGKTMTPT----- 446
Db 1239 YQGEDTLVLMFYNOODTLDSYKKNASMQCLYIF-ADMAS-----KMTPEQSNVYRDN 1289
Qy 447 -----DFTTGEVKYTHIAGRDLFKYTVKPRDTP 475
Db 1290 SYQGFDTNNVRNNRAEDYEIPSSVSRKDYLGWDYLLSMVYNGDIPTINYKAASDL 1349
Qy 476 DTFLEKHKYIEKGY-----REKGAIEYSGLTETOLRAATOLAIYFFDSAELODKLKD 531
Db 1350 KIYISPKRIITHNGYEGOKRNQCNLMNKYKLGDKFIYVTSLGVPNNSSKLMFYPYQ 1409
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Db 1410 YSG-----NTSGLNGRLL--FHRDTTYP--SKVEAMIPGAKRSLTNQAAIGDDYATDSL 1461
Qy 583 -HPEDLVDIIMEDEKKEVI-----PYTHNLTL-----RKVTGLADRTDPE----- 626
Db 1462 NKPDOLKQYIMTDSKGTATVSGVEINTAISPAAKQOILYKAGKEQTFADKQVSIOP 1521
Qy 627 -----TELKNNKQELLSSQYVTKTKNLEF--KDGK-----ATINLKHG 662

Db 1522 SPSEDEKNNQFNALEIDSGLNFINNSASIDVFTTAAEDGRKLGYESFIPYTLKAVSTD 1581
Qy 663 ESLLQGLPEGYSYLKVEQSEGYKRVKVS---QEVANADVSKTIGTSETLAFENKE 718
Db 1582 NALTLHNENGAQYM---OMOSYRRLNLTFLARQIVARAT---TGIDTLLSMETONIOE 1634
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Db 1635 P-----QLGKGFEYATFVLPYNLSTHG 1656

RESULT 4
US-09-870-759-45
; Sequence 45, Application US/09870759
; Patent No. US20020177551A1
; GENERAL INFORMATION:
; APPLICANT: TERMAN, David S
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT OF NEOPLASTIC DISEASE
; FILE REFERENCE: 870759
; CURRENT APPLICATION NUMBER: US/09/870,759
; CURRENT FILING DATE: 2002-01-14
; PRIOR APPLICATION NUMBER: US 60/208,128
; PRIOR FILING DATE: 2000-05-30
; NUMBER OF SEQ ID NOS: 166
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 45
; LENGTH: 1183
; TYPE: PR1
; ORGANISM: Staphylococcus aureus
US-09-870-759-45

Query Match 3.8%; Score 148; DB 10; Length 1183;
Best Local Similarity 19.7%; Pred. No. 0.013;

Matches 165; Conservative 123; Mismatches 299; Indels 252; Gaps 44;

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Qy 110 NLKAPPLGS-----DSSVKKWKYKKHDKISKRFEDYAMSPRITG----- 148
Db 242 DEKAPR-GSKITVNDTKNTIDVTIPQIGSYNSFSINYK---TKITNEQKEFYVNS 295
Qy 149 -----DELNOKLRAVYNGHPONANGIMEG-----LEPNAIRVQEAWYYSDNA 194
Db 296 QAWYQEHKREYVNGK--SENHTVHNINANGIEGYKGLAKVLKQDKDR-----A 344
Qy 195 PISNPDESK-RESESNLVSTSQLSMRQALKOLIDPNLATKMPKOVDDFOLSESE- 252
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Qy 253 ---DKGDKY-----NKGYNLISGL-----VPTKPTPGDPPRPNPQPTSV 293
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Qy 294 LIRKVAIGYS-----KLLEGATLQLTGDVNSFOARVSSND-IGERLELSDGT 342
Db 452 YFKLYKQODNONTTPVDKAEIKKLEDDGTITVMSNL-----PENDKGKAIRK----- 498
Qy 343 YLTLEIN-----SPAGYSIAE-----PI-TFKVAGKVYTTIIDKQIENPKET 385
Db 499 YLWKEVNAQGEDTTPGTYTKKENGVLVNTKEPIETTSISGEKAWMDKQDKRREP-- 556
Qy 386 VEYSVEAYNDFEEFVLTONAKFY---AKKNGSSQVYVYCFMADLKPPDSEDG 440
Db 557 ---VSVNLNANGKRVTLDTVSTNNKYEERKDLPKYDEG-KKIEYTVEDHVADYTTDIN 612
Qy 441 GKTMTDEFTTGEKYTHIAGRDLFKYTVKPRDTPFLKHKKVIEK----- 488
Db 613 GTTITTKYTPGESAVTAKMMDNNODGKRPFIEIVELYQDGAKAQTAIILSNWTH 672
Qy 489 ---GYREKGAIEYSGLETOLRAATQ-----LAIYFTDSALDKDLKDY 532

Db 673 TWTGLDEKAGQOQVYKVEELTFYKGYTTHVDNNDMGNLIVTNKYPTETTSISGEKWD- 731
Qy 533 HGGDMNDSTLAAKILVEAODSNRPQLDDEFFIPNNKXSL---ISTOMHPEDLVD 589
Db 732 ---DKNN-----ODKREKYSVN-LIADGKRVKTLVDYVSTNNKYE-FKD 772
Qy 590 IIRMEDKEVIVPYTHNLTKRYTGLAGDKTKDFHEIE-----LKNKQELLQPTVKT- 643
Db 773 LPKYDECKI-----EYIVT---EDHVKDYTTDINCTTITNKYTPETSATYVKNM 820
Qy 644 -DKTNLE-----FKDGKAT-----INKHGESYTLQGLPE-----GYSLVKE- 660
Db 821 DDNNNDGKRPTTEIKVELLYQDGRKATGTALINSNMNTHTWTGLDEKAGQOQVYVEEL 880
Qy 681 TDSEGYKRVKNSQEVANATYSK-----TGITDETLAFENNEPVPYPTVDOKI--NG 731
Db 881 TKVKGYYTHVDNNDMGNLIVTNKYPTETTSISEKWDKDNODGKRREKYSVNLANG 939

RESULT 5

US-09-815-242-5898
; Sequence 5898, Application US/09815242
; Patent No. US2002006159A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Karl L.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
; TITLE OF INVENTION: Identification of Essential Genes in
; TITLE OF INVENTION: Prokaryotes
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5898
; LENGTH: 1349
; TYPE: PR1
; ORGANISM: Staphylococcus aureus
US-09-815-242-5898

Query Match 3.7%; Score 147; DB 9; Length 1349;
Best Local Similarity 20.2%; Pred. No. 0.019;

Matches 203; Conservative 91; Mismatches 338; Indels 372; Gaps 44;

Qy 8 NKINTLNTORVLSKNS--KRFYTLVGVFLMIFALVTSWVGATVYGLVSSTP----- 59
Db 208 NSNNENNADIIILKSTAPKRLNTR-----MRIAAYOPSSTEAKNVNDLITSNTTLRVVDA 262
Qy 60 ---NAINP---DSSSEKRWYGYESYVRGHPYKQFRVAHDLRVNLEGSRSYQVCFNLKKA 114
Db 263 DKNNKIVPADYIYLSLSQITVDKVKSGDIF-----TIKYSDVYQVGLNPEDI 311
Qy 115 FPLGS-----DSSVKKWKYKHG-----ISTKFEDYAMSPRITGDELNOKLRAVYNGH--- 163

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Db      312 KNIGDKPNNGETATATKHDPTANLLITYFTDY-----DRNSQMGINSIYDA 364
Oy      164 ---PQANGIMEGLEPLAIRVTOEAVVYSDNAPISNPDESFKRESNL-----211
Db      365 DTIPSKNDVEFNVTIGTTTKTTANIOYPPYVNEKNSISAFETVSHGNKENPGY 424
Oy      212 -----VSTQSLSMRQALK-----QLIDPNLATKMPKQVPPDFQLSIFSEDEKDGKYNKY 262
Db      425 KQTIYVNPSENSLTNAKLKQAYHSSYPNNIGQIKKDVTD---IKIYO-VRKGYTLNKG 480
Oy      263 QNLSGGLVPTKPPPTGDPMPMPQPTSVLIRKAYAGDSK-----305
Db      481 D-----VNTKELT-----DVTNOLQKITTYGDNNSAVIDFGNADSAVWVN 522
Oy      306 -----LLEGATLQLTGD-----NV 319
Db      523 TKFOYTNSPPLVOMATLSSTGNKSVSTGNALGFTNNQSGAGQEVYKIGNYWEDTNK 582
Oy      320 NSFO-----ARFSSN---DIGERIELSDGTYTTEL-----NSPAGS 355
Db      583 NGVOELGKGVGNVTVFEDNNTNTKVEAVTKEDGSYLINLPNGDYRVERFSLPKGYE 642
Oy      356 IAE-----358
Db      643 VTPSKQGNNEELDSNGLSVTVNGKDNLSADLGITKPKYNLCQYWEDTNKNGIQODE 702
Oy      359 -----PTFKVEAGKY---TTIDGK-----QIENPKKEIPEPSVAYNDF 397
Db      703 KGISGVVTLTKDENGDVLKVTYTDADGKYKFTDLHNGVYKVEFTTPEGYPTTYVSGSDI 762
Oy      398 EEFSS-VLTTQNV-----AKFYAKNNKNGSSQVYVYCNADLKSPDSED---GGKT 443
Db      763 EKDSNGLTGTVINGADNMTLDSGFKTPKYNLGNVWEDTNKQKQ---DSTREKISGVT 820
Oy      444 MPTPFTGEVYKTHIAGRD-LFKYTVKPRDTPDFLKHKKVIEKGYREKQALEY---499
Db      821 VTLKNEGEVLOTIKTKDKGKQFT-----GLENGTYKVEFETP 859
Oy      500 SGLTETOLRAATQALAI-YFTDSAEELDKK-----LKDY-----HGF 536
Db      860 SGYPTQVSGSTDEGIDNSGTGTGVIKDKNDFTIDSGFKPYTLGQYWEDTNKNGVQ 919
Oy      537 DMNSTALVA-----KILVEYAQDSNP-QLTDDFPIPNNKQSLIGTQWHE 586
Db      920 DKDEKGISGVTVTLKENDKVLKTVTIDENKGYQFTDL---NNGTYK-----963
Oy      587 LVDTIRMEDKKEVIP-VTHNMLTLRK-----TVTGL---AGDRKDFHEIEELKNNKQEL 636
Db      964 ---VEFTPSGYPTSVTSNDPTEKOSNGLTITGVIKADADNMTLDSG---KTPKYSL 1016
Oy      637 -----LSQTVKTDKTNLEFKDKKATINLKHGSLTLQGLPEGYSYLKETSDESGYVK 689
Db      1017 GDYVWYDSNKKDKQDSFEKGIKDYKVTLLNEKGEVIGTTKIDENKGYCFDNLDSGKYVI 1076
Oy      690 VNSEVANATYSKTGISDTEFLAFENKKEPVPTGVQOKT-NGY 732
Db      1077 F--EKPAGLQTVTNTTEDKDKADGGEVDTITDHDFTLDNGY 1118

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RESULT 6

US-09-815-242-13137

Sequence 13137, Application US/09815242

Patent No. US20020061569A1

GENERAL INFORMATION:

APPLICANT: Haselbeck, Robert

APPLICANT: Ohlsen, Karl L.

APPLICANT: zyskind, Judith W.

APPLICANT: Wall, Daniel

APPLICANT: Trawick, John D.

APPLICANT: Carr, Grant J.

APPLICANT: Yamamoto, Robert T.

APPLICANT: Xu, H. Howard

```

; TITLE OF INVENTION: Identification of Essential Genes in
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; PRIOR APPLICATION NUMBER: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13137
; LENGTH: 1349
; TYPE: PRT
; ORGANISM: Staphylococcus aureus
US-09-815-242-13137

Query Match      3.7%; Score 147; DB 9; Length 1349;
Best Local Similarity 20.2%; Pred. No. 0.019;
Matches 203; Conservative 91; Mismatches 338; Indels 372; Gaps 44;

Oy      8 NKLNTLNTORVLSKSS--KRTVTLVGVFLMFLVTSNAGKATYFGLVESTP-----59
Db      208 NSNNMNMADILPKTAPKRLNTR-----MRTAAVQPSSTKAKVNDITSTTLTVDA 262
Oy      60 ---NAINP---DSSSYRYWGYESYRGHPYKQFVANDLRNLEGSRSYOYCFNLKA 114
Db      263 DKNKTIYRQDYLSLSKQITVDDKYSQDYF-----TIYSQTVQYGLNPEDI 311
Oy      115 PPLGS---DSSVKWKYRKHDC---ISTKEDYAMSBRITGDELNOKLRAYMNGH---163
Db      312 KNIGDKPNNGETATATKHDPTANLLITYFTDY-----DRNSQMGINSIYDA 364
Oy      164 ---PQANGIMEGLEPLAIRVTOEAVVYSDNAPISNPDESFKRESNL-----211
Db      365 DTIPSKNDVEFNVTIGTTTKTTANIOYPPYVNEKNSISAFETVSHGNKENPGY 424
Oy      212 -----VSTQSLSMRQALK-----QLIDPNLATKMPKQVPPDFQLSIFSEDEKDGKYNKY 262
Db      425 KQTIYVNPSENSLTNAKLKQAYHSSYPNNIGQIKKDVTD---IKIYO-VRKGYTLNKG 480
Oy      263 QNLSGGLVPTKPPPTGDPMPMPQPTSVLIRKAYAGDSK-----305
Db      481 D-----VNTKELT-----DVTNOLQKITTYGDNNSAVIDFGNADSAVWVN 522
Oy      306 -----LLEGATLQLTGD-----NV 319
Db      523 TKFOYTNSPPLVOMATLSSTGNKSVSTGNALGFTNNQSGAGQEVYKIGNYWEDTNK 582
Oy      320 NSFO-----ARFSSN---DIGERIELSDGTYTTEL-----NSPAGS 355
Db      583 NGVOELGKGVGNVTVFEDNNTNTKVEAVTKEDGSYLINLPNGDYRVERFSLPKGYE 642
Oy      356 IAE-----358
Db      643 VTPSKQGNNEELDSNGLSVTVNGKDNLSADLGITKPKYNLCQYWEDTNKNGIQODE 702
Oy      359 -----PTFKVEAGKY---TTIDGK-----QIENPKKEIPEPSVAYNDF 397
Db      703 KGISGVVTLTKDENGDVLKVTYTDADGKYKFTDLHNGVYKVEFTTPEGYPTTYVSGSDI 762
Oy      398 EEFSS-VLTTQNV-----AKFYAKNNKNGSSQVYVYCNADLKSPDSED---GGKT 443

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ORGANISM: *Candida albicans*
US-10-245-802-20

Query Match 3.6%; Score 141; DB 15; Length 2297;
Best Local Similarity 17.0%; Pred. No. 0.14;
Matches 114; Conservative 113; Mismatches 262; Indels 180; Gaps 27;

OY	116	PLGSDSVKKKKYKKHHDGISTFE--EDYAMSFRITGDELNOKLRAMVNGHONANGIMEG	173
Db	640	PEGSDSVIIKEPHNPVTYTKFESEFATYTTT-----NYEGDTSVIV- 684	
OY	174	LEPNTAIRVIOEAWWYYS-----NAPISNPDESKRESESNLSTQSLSMROAL	224
Db	685	REPNNPVTYTTT---FYSEFATYETITNGC-EGTDSYIVAREPHNPVTYTKFEYSESAT	740
OY	225	KOLI-----DPNLAATMPKQVPDPOLFSTFESEDKDGKRYKKGYONLI-----	266
Db	741	TEITITNYPEGDSYIVAREPH---NPVTYTKFEYSEFATYETITNYPEGDSYIVAREPH	796
OY	267	-----SGGLVPTKPPPPGDPMPMPPOPTSVILIRKAYIGDYKSLLEGAT--LO	313
Db	797	NPVTYTKFEYSEFATYETITNGC-PL-----GIDSIYI-----HPLLESSSTAIPE	842
OY	314	LYGDNVNSFOARFSSNDIGERIELSGCYTLYTELNSPAGYSIAEPITFEYKACKVYTI	373
Db	843	SSDSINISSSAOE--SSSSVEQSFPSADETSIVELSTRSDIP--SSSILGTSSESTVSSY	899
OY	374	DGKQIEPNKEIYEPYVEAVNDEEFSVLTQNYA-----KFIYAKNNK--GSSQVYV	425
Db	900	DSYSSSTSESSIASSTSYSSSSSTESSSTLSSDRYSSISPTTSFYDSSSDELESTITY	959
OY	426	CFNADLK-----SPPSEDCGKTMPTDFTTGEVKYTHLAGRDLEFY- 466	
Db	960	SSSIDAQQSHLYGVSNSISPTSGEIISSSSSEESTSATDALVSSDA--SSILSDTSY	1017
OY	467	---IVKRRDDPDPFLKHKKVIEIKYREKQALIEGSLTQOLRAAQLIAYTTDAE	523
Db	1018	PSSTSPSDPHPTI-----AESDSQISIFITSTVEISSDVS 1056	
OY	524	LDRKLDYHGFQDMNDSTLAVAKILVEAODSNPPOLDTDFIIPNNKKQSLIGTOMH	583
Db	1057	LTSPPESPSSSRNLN-----SDSSSPSTQDQD--LIISSPSTLTKSSGS 1100	
OY	584	PEDLVDIRMEDEKKEVLPVHNLTLRKTYVGLADRTKDFEFLKNNKOLLSTQYVT	643
Db	1102	RESIGITLSESSDSIPTTFS--TRYSPSCMSR---HYTNSTETSVSDVAVSSVAG 1156	
OY	644	KTYLLEFKDQATNLKHGESLTLOGLPEGYSYLVKETDSDGKVKVNSOEVANVTKT	703
Db	1156	DEIS-----ESSVSYISESESYSVE-----SVASESVASEVASE 1191	
OY	704	GITSDETLA 712	
Db	1192	SVASESVYA 1200	
RESULT 9			
US-09-815-242-11522			
: Sequence 11522, Application US/09815242			
: Patent No. US20020061569A1			
: GENERAL INFORMATION:			
: APPLICANT: Haselbeck, Robert			
: APPLICANT: Ohlsen, Karl L.			
: APPLICANT: Zyskind, Judith W.			
: APPLICANT: Wall, Daniel			
: APPLICANT: Trawick, John D.			
: APPLICANT: Carr, Grant J.			
: APPLICANT: Yamamoto, Robert T.			
: APPLICANT: Xu, H. Howard			
: TITLE OF INVENTION: Identification of Essential Genes in			
: TITLE OF INVENTION: Prokaryotes			
: FILE REFERENCE: ELITRA.011A			
: CURRENT APPLICATION NUMBER: US/09/815, 242			

```

; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 1410
; SOFTWARE: fastseq for Windows Version 4.0
; SEQ ID NO 11522
; LENGTH: 1167
; TYPE: PRT
; ORGANISM: Helicobacter pylori
US-09-815-242-11522

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Query Match	3.5%	Score 139.5;	DB 9;	Length 1167;
Best Local Similarity	19.1%;	Pred. No. 0.06;		
Matches 136;	Conservative 110;	Mismatches 282;	Indels 185;	Gaps 32;
QY	STOYVCFLLKAPFLPGSSSVKKM-----YKKHP-----GISTFEDYAMSPR	145		
DB	SYIALINITQA-KONRDSILAKFRNALITSLDYLEKKDKGVYIPGEYFEDLEKEKE	562		
QY	ITGDELNOKLRAVMYNHPQANGM-----EGLEPLNALRYQEAVMYSDNAPISNPDES	202		
DB	IKTTMEKONIVII--GNPYSGSAKSENDNOMNISHPEKLEKRYEYETGKNSIAON----	616		
QY	FKRESSESLVTSQSLSLKRLAK-----QLIDPNLNTAKMPKQVPPDFOLSTRES	251		
DB	-KNSTRDTLLHS--TRMSDLLKDKGVIGFVYVNGSFIIDSKSADGRKCAVADFS-HLYAL	672		
QY	EDKGDYKKGQYNLLSGGLVETKPTPGDPMPMPNOPTSVL-----IRKRYA	299		
DB	NLRGNARTSGBER-----KKQDGIIFDSGSRYTVAILFVFKDKADPNHTIFYE	721		
QY	IGDYSKLLEGATLQITGDVNVSFOARVSSNDIGERT-ELSDGYITTLTSLNSPACYSIAE	358		
DB	VEDYLKREAKLNLANFENLDSVPEKFEITPNDKGIMQNRDDEKLLPLRKDKSKITFN	781		
QY	PITKFEVKGKYTTIIDGKQIENPKKEIPEYSEVAYNDFEESVYLTQONAKFYAKKKN	418		
DB	AI-EDLNSNGKITSND-----PW--VYNFSQRTLMQSVON-----	813		
QY	GSSQVYVCCFNADLK-----SPPSEDEGKMTPTDFTTGEVKKYTHIAGRDLEKYYTV	468		
DB	-----CIDYNNADLKRFEFRFAEQKQPAKDKGIKSSAD-----RYKHLNDREITTDKT	863		
QY	KPRPTDPTFLAKHKVIEKEKYREKGAIEVSGLETPL--KAATQALAIYY--PIDS	521		
DB	KIATMDG--LKN-KLI-----KNEMLPSGEMERYLALYRPNKQMLTWDKNLINRQ	912		
QY	AELDK-----LKDYHGFDMNDSTSLAAKILIVERAODSNPQLDLDFFETPINNNKY	574		
DB	SQLRKIPFDKARNAVINTGYNGCKRDPFALYSDFISDSLSLSPQATPLRYIIDGLGRY	971		
QY	QSLIGTQMHPELDVDIRMEDKKEYIP-----VTINLTIRKTVTGLAGDRYKDF	623		
DB	NAISGY-----ALNLFRRHYKDAALTEEELEFYUAIENHHKGYLEKKYNSLAKAPR--	1023		
QY	HFEELKNNKOELLQYVTKDTKTNLEFDDGKATINLKHG--ESLTLQGLPGYSVLYKET	681		
DB	---IALSDFEKELNMLKELALHLNTEESGMHTSVKNNLLESAMEBY---YDYIOMKK	1077		
QY	DSEQYKVK-----VNSQEVANATVSKTQITSDETLAFENN	716		

Db 1078 DKGRIRKYNHHTTQIPKADYVNGKSAIDWIERQITKDKSLIENN 1130

RESULT 10

US-10-011-366-10

Sequence 10, Application US/10011366

Publication No. US20030054493A1

GENERAL INFORMATION:

APPLICANT: Williams, James A.

Kink, John A.

TITLE OF INVENTION: IDENTIFICATION OF NEUTRALIZING EPITOPES OF TOXIN A AND TOXIN B FOR THE TREATMENT OF C. DIFFICILE DISEASE

NUMBER OF SEQUENCES: 22

CORRESPONDENCE ADDRESS:

ADDRESSEE: Medlen & Carroll

STREET: 220 Montgomery Street, Suite 2200

CITY: San Francisco

STATE: California

COUNTRY: United States of America

ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/011.366

FILING DATE: 16-NOV-2003

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/08/957.310

FILING DATE: 23-OCT-1997

APPLICATION NUMBER: US 08/329,154

FILING DATE: 24-OCT-1994

APPLICATION NUMBER: US 08/161,907

FILING DATE: 02-DEC-1993

APPLICATION NUMBER: US 07/985,321

FILING DATE: 04-DEC-1992

APPLICATION NUMBER: US 07/429,791

FILING DATE: 31-OCT-1989

ATTORNEY/AGENT INFORMATION:

NAME: Ingolia, Diane E.

REGISTRATION NUMBER: 40,027

REFERENCE/DOCKET NUMBER: OPHD-01121

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 10:

SEQUENCE CHARACTERISTICS:

LENGTH: 2366 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 10:

US-10-011-366-10

Query Match 3.5%; Score 139; DB 15; Length 2366;

Best Local Similarity 19.6%; Pred. No. 0.21;

Matches 154; Conservative 86; Mismatches 249; Indels 296; Gaps 38;

Db 83 PYKORVAH-----DLRVNLEGRSTQYVCFNKKAFLGSDSSVKKWY 127

Db 1633 PYEIKFNTLENTLYLVGNRQNMIVPEPNYDLDDSGDISSTVINFSQKLYGIDSCVKNK-- 1690

Db 128 KKHDDGSTRFEDVAMSRITGDELNQLRAVMYNGHQ-----NANGIMEGLEPLNAIRVT 183

Db 1691 -----WVISPNTYDEINITYETNTNTYPEVIVLEADANYINEKIN--VNINDS 1737

Db 184 QEAVMYSDNAPISNPDESKRESESNLSTQSLRLKOLKI-----DPNLATKMPKO 239

Db 1738 IRVYV-----SNGDNF-----ILMSTSEENKYSQVKIRVNVFKOKTLANKLS-- 1781

QY 240 VPDDFOLISFESEDKG-----KYNKGYONLISG---GLVPTKPPPGDBMP 284

Db 1782 -----FNFSKQOVPSSEITLSTPSY---YEDGLIGYDLGLV----- 1816

QY 285 PNPQPTSVLIRKAYIDYSKLEGATLQTLGDNVNSFQARVSSNDIGERIELSDCTYT 344

Db 1817 -----SLYNEKFIYNNFGMMVSG--LIYINDSLYFKPPV--NMLITGFVVGDKRY 1865

QY 345 LTELNSPAGYSIAPI-----TFKYEAKRY-----TI-----IDKQIE 379

Db 1866 FNPINGAA-SIGETITIDKNIYFNQSGVLOTGVFSTEDFKFAFAPNTIDENLEGALD 1924

QY 380 NPNKEIYV---YSVEAYNDPEESVLTQNYAKFYA-----KKNKSSOVVYCEN 429

Db 1925 FTGKLIDENIYFDDNYRGAVEMKELDGEHM---YSPPTGAKFKLNOIGDYKKYFNS 1981

QY 430 D--LKSPPDESDGKTYTPPTTGCEVYTHIAGR-----DLFKTYK 469

Db 1982 DGVWQKGFVSINDRKHYFDDSGVWKVGYTEIDGKHFFAENGEMQIGVFNTEDGFKY-- 2038

QY 470 PRDTPDTFLKHKVIEKGYREKQAIKESGLTETQLRAATQLAIFYFTDSAE----- 523

Db 2039 -----FAHNEDL-----GNEGEIISYGLINFNK-----IYFPDSTFAYVWK 2080

QY 524 -----LDKDKLDYHFGDMN-----DSTLAVAKIVE----- 551

Db 2081 DLEDGSKYFDEDAEAYIGLSLINDQYFENDGIMQVGFYINDKVFYFSDGIIESG 2140

QY 552 -----YAOASNPLQTLDD-----EFIRNN-----KYQSL----- 577

Db 2141 VQINDNYFYIDNGIYQIVFPTSDGKYFAFANTVNDNIYGOAVEYSLVRYGEDVY 2200

QY 578 -----IGTQWHPEDLVIDIRMEDKKEVIVTHTLTKTVTGLAGDRTDHF----- 626

Db 2201 FGETYTIETG-----IYDMENESKYYFNET-----KKACKGNLIDDKIYFDEGIM 2251

QY 627 -----IELKNNKQELLSTQVTKTDTNLEFKDGKATINIK---HESLTLQ---GLPEGYS 675

Db 2252 RTGLISFENNYYF-----NENGEMQGYINIEDKMYFGDGVWQIGVFNTPDGFK 2303

QY 676 YLWKE 680

Db 2304 YFAHQ 2308

RESULT 11

US-10-160-758-13

Sequence 13, Application US/10160758

Publication No. US20030036076A1

GENERAL INFORMATION:

APPLICANT: EXELIXIS, INC.

TITLE OF INVENTION: CADS AS MODIFIERS OF THE p53 PATHWAY AND METHODS OF USE

FILE REFERENCE: EX02-089C

CURRENT APPLICATION NUMBER: US/10/160,758

CURRENT FILING DATE: 2002-06-03

PRIOR APPLICATION NUMBER: US 60/296,076

PRIOR FILING DATE: 2001-06-05

PRIOR APPLICATION NUMBER: US 60/328,605

PRIOR FILING DATE: 2001-10-10

PRIOR APPLICATION NUMBER: US 60/357,253

PRIOR FILING DATE: 2002-02-15

NUMBER OF SEQ ID NOS: 16

SOFTWARE: Patentin version 3.1

SEQ ID NO 13

LENGTH: 4590

TYPE: PRT

ORGANISM: Homo sapiens

US-10-160-758-13

Query Match 3.5%; Score 136.5; DB 15; Length 4590;

Best Local Similarity 19.8%; Pred. No. 1;

Matches 176; Conservative 118; Mismatches 316; Indels 281; Gaps 46;


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QY 47 AKTVEGLVESSTPAI---NPDSSSEYRWYGE-----SVYRGHPYYKQFVANDLRVNL 98
D 2573 AKDAGGVAFCTVAVILTDNDNAPQFRATKYEVNIGSSAAKTSVKSASDAD----- 2626
QY 99 EGSRSYOVYCF-----NIKKAFLPGSDSVKAKWKKHHDGISTKFEYAMSFRITGDEILNQ 153
D 2627 EGSNADITYAIEADSESVKENLEINKLSGVITTKESLIGLENEFFTF----- 2674
QY 154 KLRVMTNGHPQANNGIM-----EGLEP-----LNAIRYTOE 185
D 2675 -VRAV-DNGSPSKESVVLVYVKILPPEMQLPKFESEPYTFTVSEDVPGTEIDILIRAEHS 2732
QY 186 AWMYTS---DNAPISNDESEFKRESNLVSTS-----QLSLMRQALQOLDPN 231
D 2733 GTVYLXSVLKGNTPESNRESFVIDRQSGRLKLEKSLDHETTKWQFSLACTQD--DHE 2790
QY 232 LATKMPKQVPDDFOLSTFSEEDKDKYKNG-----YONLSGGLV-----PRKPTPG 279
D 2791 MVASV-----DVSIGVKANDANDNSPVFESSPYEAFIYENLPGGSRVIOIRASDADSGTNG 2844
QY 280 DPPRPNQOPOTTSVILIRKKAIGDYSKLLEGATL-QLTGDVNSFOARVFNSSNDIGERIEL 338
D 2845 QVMYSLDOSQVEV-IESFAINMETGWI--TTIKELHEKRDNYQIKVVAS-DHGEKTIOL 2900
QY 339 SDGT---YTLTELNSPAGYSIAEPIYFKVE-----AGKVYITLI-----DGKQIE 379
D 2901 SSTRIVDYVTVDVND-----SPPRFAELIKGTVSEDDPQGVIALISTDADSEIT- 2952
QY 380 NPKNIEVYPSVEAYNDFEESVLTQNYAKFYAKKNGSSQVYVCFNADLKSPDSED 439
D 2953 --NRQVT--YFITGDDPLGQFAVETIQNEKMY-----VKRPDLREK 2990
QY 440 -GGKTMPPDFTG-----EVKY-----THIAGRDLEKYTKPRDTPDITLKHKK 484
D 2991 RDNVLLITATDGTFFSSKAIVEYKVLANDNSPVCERTLYSDTI-PEDVLP----- 3040
QY 485 VIEKGYREKGOAIEYSGLTETOLRAATOLAIYFTDSAE-----LDKDK 528
D 3041 -----GKLIQIASTADADISNAEITITLLGSGAEKFKLPDGTGELKTSPLDREE 3091
QY 529 LKDYH-----GFG-----DMNDST--LAVAKLIVEAODSNP-----POL 561
D 3092 QAVYHLLVLRATDGGRCQASIVVTLIEDVNDNAPEFSADPYAIVFENTEBGTLLTRQA 3151
QY 562 TDLDFFIPNNKKYSLIGT---QWHPEDVLIIME---DK-----EVIPTVHNLT 608
D 3152 TDADAGL-NRKILYSLIDSADGQFSINELSGIIOLEKPLDRELQAVYTLISKAVDQGLPR 3210
QY 609 RKYVTGLA-----GDRTDHFHEIELKNNKQELLSTQ-----VKTDKTNLEF--- 650
D 3211 RLTAITGIYIVSLDINDNPPVFEYREYGATVSEDLIVGTEVLOYVYASRDIENAEITYYS 3270
QY 651 -----KDGKATINLKHGESLTLQGL---PEGYSYLVKEND-----SEGKYKVNQSEV 695
D 3271 IISGENHGKFSIDSKTGAFFIENLDYESSHEVLYLEATDGGPISLSDVATVAVNVTDI 3330
QY 696 ANAT-----VSKTGITSDETLAEENKKEPVPTGVQDKINGYIALIYIAG 740
D 3331 NDNTPEFSODTYTIVISEDAVL--EOSVITVMADADGPGNSHIYSIIDG 3379

RESULT 12
US-10-160-758-14
; Sequence 14, Application US/10160758
; Publication No. US20030036076A1
; GENERAL INFORMATION:
; APPLICANT: EXELIXIS, INC.
; TITLE OF INVENTION: CADS AS MODIFIERS OF THE P53 PATHWAY AND METHODS OF USE
; FILE REFERENCE: EX02-089C
; CURRENT APPLICATION NUMBER: US/10/160, 758
; CURRENT FILING DATE: 2002-06-03
; PRIOR APPLICATION NUMBER: US 60/296, 076
; PRIOR FILING DATE: 2001-06-05
```

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QY 47 AKTVEGLVESSTPAI---NPDSSSEYRWYGE-----SVYRGHPYYKQFVANDLRVNL 98
D 2573 AKDAGGVAFCTVAVILTDNDNAPQFRATKYEVNIGSSAAKTSVKSASDAD----- 2626
QY 99 EGSRSYOVYCF-----NIKKAFLPGSDSVKAKWKKHHDGISTKFEYAMSFRITGDEILNQ 153
D 2627 EGSNADITYAIEADSESVKENLEINKLSGVITTKESLIGLENEFFTF----- 2674
QY 154 KLRVMTNGHPQANNGIM-----EGLEP-----LNAIRYTOE 185
D 2675 -VRAV-DNGSPSKESVVLVYVKILPPEMQLPKFESEPYTFTVSEDVPGTEIDILIRAEHS 2732
QY 186 AWMYTS---DNAPISNDESEFKRESNLVSTS-----QLSLMRQALQOLDPN 231
D 2733 GTVYLXSVLKGNTPESNRESFVIDRQSGRLKLEKSLDHETTKWQFSLACTQD--DHE 2790
QY 232 LATKMPKQVPDDFOLSTFSEEDKDKYKNG-----YONLSGGLV-----PRKPTPG 279
D 2791 MVASV-----DVSIGVKANDANDNSPVFESSPYEAFIYENLPGGSRVIOIRASDADSGTNG 2844
QY 280 DPPRPNQOPOTTSVILIRKKAIGDYSKLLEGATL-QLTGDVNSFOARVFNSSNDIGERIEL 338
D 2845 QVMYSLDOSQVEV-IESFAINMETGWI--TTIKELHEKRDNYQIKVVAS-DHGEKTIOL 2900
QY 339 SDGT---YTLTELNSPAGYSIAEPIYFKVE-----AGKVYITLI-----DGKQIE 379
D 2901 SSTRIVDYVTVDVND-----SPPRFAELIKGTVSEDDPQGVIALISTDADSEIT- 2952
QY 380 NPKNIEVYPSVEAYNDFEESVLTQNYAKFYAKKNGSSQVYVCFNADLKSPDSED 439
D 2953 --NRQVT--YFITGDDPLGQFAVETIQNEKMY-----VKRPDLREK 2990
QY 440 -GGKTMPPDFTG-----EVKY-----THIAGRDLEKYTKPRDTPDITLKHKK 484
D 2991 RDNVLLITATDGTFFSSKAIVEYKVLANDNSPVCERTLYSDTI-PEDVLP----- 3040
QY 485 VIEKGYREKGOAIEYSGLTETOLRAATOLAIYFTDSAE-----LDKDK 528
D 3041 -----GKLIQIASTADADISNAEITITLLGSGAEKFKLPDGTGELKTSPLDREE 3091
QY 529 LKDYH-----GFG-----DMNDST--LAVAKLIVEAODSNP-----POL 561
D 3092 QAVYHLLVLRATDGGRCQASIVVTLIEDVNDNAPEFSADPYAIVFENTEBGTLLTRQA 3151
QY 562 TDLDFFIPNNKKYSLIGT---QWHPEDVLIIME---DK-----EVIPTVHNLT 608
D 3152 TDADAGL-NRKILYSLIDSADGQFSINELSGIIOLEKPLDRELQAVYTLISKAVDQGLPR 3210
QY 609 RKYVTGLA-----GDRTDHFHEIELKNNKQELLSTQ-----VKTDKTNLEF--- 650
D 3211 RLTAITGIYIVSLDINDNPPVFEYREYGATVSEDLIVGTEVLOYVYASRDIENAEITYYS 3270
QY 651 -----KDGKATINLKHGESLTLQGL---PEGYSYLVKEND-----SEGKYKVNQSEV 695
D 3271 IISGENHGKFSIDSKTGAFFIENLDYESSHEVLYLEATDGGPISLSDVATVAVNVTDI 3330
QY 696 ANAT-----VSKTGITSDETLAEENKKEPVPTGVQDKINGYIALIYIAG 740

PRIOR APPLICATION NUMBER: US 60/328, 605
PRIOR FILING DATE: 2001-10-10
PRIOR APPLICATION NUMBER: US 60/357, 253
PRIOR FILING DATE: 2002-02-15
NUMBER OF SEQ ID NOS: 16
SOFTWARE: PatentIn version 3.1
SEQ ID NO 14
LENGTH: 4590
TYPE: PRT
ORGANISM: Homo sapiens
US-10-160-758-14

Query March 3, 54; Score 136.5; DB 15; Length 4590;
Best Local Similarity 19.8%; Pred. No. 1;
Matches 176; Conservative 118; Mismatches 316; Indels 281; Gaps 46;

QY 47 AKTVEGLVESSTPAI---NPDSSSEYRWYGE-----SVYRGHPYYKQFVANDLRVNL 98
D 2573 AKDAGGVAFCTVAVILTDNDNAPQFRATKYEVNIGSSAAKTSVKSASDAD----- 2626
QY 99 EGSRSYOVYCF-----NIKKAFLPGSDSVKAKWKKHHDGISTKFEYAMSFRITGDEILNQ 153
D 2627 EGSNADITYAIEADSESVKENLEINKLSGVITTKESLIGLENEFFTF----- 2674
QY 154 KLRVMTNGHPQANNGIM-----EGLEP-----LNAIRYTOE 185
D 2675 -VRAV-DNGSPSKESVVLVYVKILPPEMQLPKFESEPYTFTVSEDVPGTEIDILIRAEHS 2732
QY 186 AWMYTS---DNAPISNDESEFKRESNLVSTS-----QLSLMRQALQOLDPN 231
D 2733 GTVYLXSVLKGNTPESNRESFVIDRQSGRLKLEKSLDHETTKWQFSLACTQD--DHE 2790
QY 232 LATKMPKQVPDDFOLSTFSEEDKDKYKNG-----YONLSGGLV-----PRKPTPG 279
D 2791 MVASV-----DVSIGVKANDANDNSPVFESSPYEAFIYENLPGGSRVIOIRASDADSGTNG 2844
QY 280 DPPRPNQOPOTTSVILIRKKAIGDYSKLLEGATL-QLTGDVNSFOARVFNSSNDIGERIEL 338
D 2845 QVMYSLDOSQVEV-IESFAINMETGWI--TTIKELHEKRDNYQIKVVAS-DHGEKTIOL 2900
QY 339 SDGT---YTLTELNSPAGYSIAEPIYFKVE-----AGKVYITLI-----DGKQIE 379
D 2901 SSTRIVDYVTVDVND-----SPPRFAELIKGTVSEDDPQGVIALISTDADSEIT- 2952
QY 380 NPKNIEVYPSVEAYNDFEESVLTQNYAKFYAKKNGSSQVYVCFNADLKSPDSED 439
D 2953 --NRQVT--YFITGDDPLGQFAVETIQNEKMY-----VKRPDLREK 2990
QY 440 -GGKTMPPDFTG-----EVKY-----THIAGRDLEKYTKPRDTPDITLKHKK 484
D 2991 RDNVLLITATDGTFFSSKAIVEYKVLANDNSPVCERTLYSDTI-PEDVLP----- 3040
QY 485 VIEKGYREKGOAIEYSGLTETOLRAATOLAIYFTDSAE-----LDKDK 528
D 3041 -----GKLIQIASTADADISNAEITITLLGSGAEKFKLPDGTGELKTSPLDREE 3091
QY 529 LKDYH-----GFG-----DMNDST--LAVAKLIVEAODSNP-----POL 561
D 3092 QAVYHLLVLRATDGGRCQASIVVTLIEDVNDNAPEFSADPYAIVFENTEBGTLLTRQA 3151
QY 562 TDLDFFIPNNKKYSLIGT---QWHPEDVLIIME---DK-----EVIPTVHNLT 608
D 3152 TDADAGL-NRKILYSLIDSADGQFSINELSGIIOLEKPLDRELQAVYTLISKAVDQGLPR 3210
QY 609 RKYVTGLA-----GDRTDHFHEIELKNNKQELLSTQ-----VKTDKTNLEF--- 650
D 3211 RLTAITGIYIVSLDINDNPPVFEYREYGATVSEDLIVGTEVLOYVYASRDIENAEITYYS 3270
QY 651 -----KDGKATINLKHGESLTLQGL---PEGYSYLVKEND-----SEGKYKVNQSEV 695
D 3271 IISGENHGKFSIDSKTGAFFIENLDYESSHEVLYLEATDGGPISLSDVATVAVNVTDI 3330
QY 696 ANAT-----VSKTGITSDETLAEENKKEPVPTGVQDKINGYIALIYIAG 740
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Db      3331 NDNTPVFSQDTYTTVISEDVAVL--EQSVITVMADMDADGSPNSHIHYSIIDG 3379
RESULT 13
US-10-060-036-157
; Sequence 157, Application US/10060036
; Publication No. US20030073144A1
; GENERAL INFORMATION:
; APPLICANT: Benson, Darin R.
; APPLICANT: Kalos, Michael D.
; APPLICANT: Lodes, Michael J.
; APPLICANT: Pershing, David H.
; APPLICANT: Hepler, William T.
; APPLICANT: Jiang, Yugu
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
; TITLE OF INVENTION: AND DIAGNOSIS OF PANCREATIC CANCER
; FILE REFERENCE: 210121.566
; CURRENT APPLICATION NUMBER: US/10/060.036
; CURRENT FILING DATE: 2002-01-30
; NUMBER OF SEQ ID NOS: 4560
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 157
; LENGTH: 4590
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-060-036-157

Query Match      3.5%; Score 136.5; DB 15; Length 4590;
Best Local Similarity 19.8%; Pred. No. 1;
Matches 176; Conservative 118; Mismatches 316; Indels 281; Gaps 46;

QY      47 AKTVFGLVSESTPNAL--NPSSSEYRMVYE-----SYRGHPYKOPRVAHDLAVNL 98
Db      2573 AKAGGKVAACCTYVILITDNDNAPQRAKTYEVNIGSSAKGTSVYKSDAD----- 2626
QY      99 EGSRSYQVCF-----NLKAPPLGSDSVKWKYKHHGISTKFEEDYAMSPRTTGDELNQ 153
Db      2627 EGSNADITYAIEADSESVKENLEINKLSGVITTKESLIGLENEFFTF----- 2674
QY      154 KLRVWYNGHROANGM-----EGLEP-----LNAIRYTOE 165
Db      2675 -VRAV-DNGSPSESRYVLYVKLLPPEMQLPKFSEPRYTFYTSVEDVPVGTEDILIRHES 2732
QY      186 AWVYYS---DNAPISNPDESFKRESNLYSTS-----QLSLRQALKQLIDPN 231
Db      2733 GTVLSLYVKNFESNDESEFVIDRQSGRLKLEKSLDHEHTTKYQPSILARQOD--DHE 2790
QY      232 LATKMKQVDDPOLSTFSEEDKDKYKNG-----YONLLSGGLV-----PRKPPPG 279
Db      2791 MVAHV-----DVSIQVKDANDNSPVFESSPYEAFIYENLPGGSRYVQIRASDADSGTNG 2844
QY      280 DPMMPNQPOTSVLLIRKKAIGDYSKLLEGATL--QLTGDVNVNFOARVFSSNDIGETIEL 338
Db      2845 QVWYSLDQSOSEV--IESFAINMETGWT--TTLKELDHEKRDVYQIRKVAS--DHGEKIQ 2900
QY      339 SDGT---YTLTLENSPAGYSIAEPIFEKVE-----AGKYVTII-----DGKQIE 379
Db      2901 SSFAIVDVAVTVND-----SPRFTAIYKGTIVSEDDPQGGVIAILSTTDADSEI-- 2952
QY      380 NPKEIVEPYSVAIVYDFEFESVLTQNTAKFYAAKNKNGSSOVVYCFENADLKSPDSED 439
Db      2953 --NRQVT--YFITGGDPLGQFAVEITQNEWKY-----YKPPIDREK 2990
QY      440 -GGKTMPDPTTG-----EVKY-----THIAGRLFKYTVKPRDTPDPTFLKHIK 464
Db      2991 RDNVLLITATDGTFFSKAIVEKVLADANDNSPVCKEYISDTI--PEDVLP----- 3040
QY      485 VIEKGYRGOALIEYSGIETQLRATQALIIYFTDSAE-----LDKDK 528
Db      3041 -----GKLMQISANDADIRSNAEIYITLLGSGAEKFKLNPTGELKSTPDLREE 3091
QY      529 LADYH-----GFG-----DMNDST--LAVAKIIVEYADSNP-----POL 561

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Db      3092 QAVYHLLVRATDGGRCQASIVYTLLEDVNDNAPEFSADPYATVFEPTBGLTRFYCA 3151
QY      562 TDLDFFIPNNKKQSLIGT---QHPEDVDIIRME---DKK-----EVIYTHNLTL 608
Db      3152 TDADAGL--NRKILYSLDSDAGQFSINLSGIILQLEKPLDREIQAVYTLSLKAVDGLPR 3210
QY      609 RKTVTGLA-----GDRTPDFHEIELKNNKQELLSQ-----VKTDKTNLEF--- 650
Db      3211 RLATGTVIYSLVDINDNPNPVFEYREYGAIVSEDIIVGTBYLVQYASRIENAEITYS 3270
QY      651 -----KDKATINKHGESLTLQGL---PEGYSLVKETD-----SEGKYKAVNSQEV 695
Db      3271 IISGENHKFSIDSKGAVFLIENLYESSHEEYLLVEADGGTSPISDVATVNVVTDI 3330
QY      696 ANMT-----VSKGTISDETLAFENKKEVPVPTGVQKINGYALIALIVING 740
Db      3331 NDNTPVFSQDTYTTVISEDVAVL--EQSVITVMADMDADGSPNSHIHYSIIDG 3379
RESULT 14
US-09-117-447-2
; Sequence 2, Application US/09117447
; Patent No. US20020168728A1
; GENERAL INFORMATION:
; APPLICANT: LUBITZ, Werner
; APPLICANT: SLEVET, Uwe
; APPLICANT: KUEN, Beatrix
; APPLICANT: TRUPPE, Michaela
; APPLICANT: HOMORKA, Stefan
; APPLICANT: RESCH, Stepanka
; APPLICANT: SCHROLL, Gerhard
; APPLICANT: SARA, Margit
; TITLE OF INVENTION: RECOMBINANT EXPRESSION OF S-LAYER PROTEINS
; FILE REFERENCE: 100564-08013
; CURRENT APPLICATION NUMBER: US/09/117.447
; CURRENT FILING DATE: 1998-12-02
; PRIOR APPLICATION NUMBER: PCT/EP97/00432
; PRIOR FILING DATE: 1997-01-31
; PRIOR APPLICATION NUMBER: DE/196 03 649.6
; PRIOR FILING DATE: 1996-02-01
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 1228
; TYPE: PRT
; ORGANISM: Bacillus stearothermophilus
US-09-117-447-2

Query Match      3.4%; Score 135; DB 10; Length 1228;
Best Local Similarity 19.3%; Pred. No. 0.15;
Matches 128; Conservative 88; Mismatches 230; Indels 216; Gaps 33;

QY      206 ESESLSVTSQSLMRQALKQLIDPNLATKMPQVDDPOLSTFSE--DKGDKYKNGYON 264
Db      551 EKESGTVVASE-----LKYNDARKKWTLPK--ADLKENTYQIRKGLSKDGIE-- 600
QY      265 LLSGGLVPTKPPDPMPNQPOTSVLIRKVAIGDYSKLLEGATLOLT----- 315
Db      601 -----LGIYNEKTYERTQDLTPAVIYSTSKN---GD-----AGLKYTEQETVAK 645
QY      316 GDNVNSFOARVFSSNDIG-----ERIELSDGTYYTL----- 345
Db      646 SENLNTFNMTTVSGSITTTQGVAVVRAGANLSALFASDIIPASVEAVTGGDGTYYKVVAA 705
QY      346 TELNSPAGYSI-----AEPIFEKYBAGK---YTTI-IDGQIENPKKEIVEPYSVE 392
Db      706 NQLENRQGYKLVFEGKATAPVVDANANLATATNYITFTTEGODYTAPT--VTKYFKGD 763
QY      393 AYVDFEFSVLTQNTAKFYAAKNKNGSSOVVYCFENADLKSPDSEDGKTKMPDPTTGE 452
Db      764 SLKDADAVTTLT-----NVDAGQKFTIQFSEELKTSGSLVGGKVT----- 804

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QY 453 VKYTHIAGRDLEFKYTVKPRODPPDTFLKHKKVIEKGYREKGOAIEYSGLETOLRAATQ 512
DB 805 -----VEKLTNGVNDAGTGTTVAVAKPTANGKVT 835
QY 513 LAIYFVDSAELEKD-KLK-----DYHFGDMNDSTLAVALILEY-----A 553
DB 836 AAVYTLTGDDNNDKADAKRLVVDKSTGDIADVAGNVIKEDILIRYSMRHTVASVKA 895
QY 554 QDSNP-----POLTDLDFIIPNNKQYSLIGTOMHEDLVDIIRMEDKKEVIPPYHNL 606
DB 896 ADKGOANASAFPTSTAD-----TKSLL-VEFNETDLAEV---KPENIYVDAAGN 944
QY 607 TLKRTVGLAGDRDKDFEIELEKNNKQELLSQTY-----KT 643
DB 945 AVAGTVTALDGS-TNKEFY-----TPSOELKAGTVYSVTIDGVRDKVNTSKYITTSFKT 998
QY 644 DKTN-----LEFKDGKATINLKHGSLTQ---GLPEGYSYLKVTDESEGR---VKVN 691
DB 999 VSANPTLSSISIAOG-AVYVDRSKTITIEFSDSPNP-TITIKKADGSTFTNYTLVAVN 1055
QY 692 SOEVANATVSKTGITSDETLAF--NKEPVYPTGVQDOK---INGYAL--IVYAGISLG 744
DB 1056 NENYTKIVFHKGVTLDDEFTQYELAVSKDPQTGTIDISKVTFITGSVATDEVKPPALVGVG 1115
QY 745 IW 746
DB 1116 SW 1117

RESULT 15
US-09-858-525A-2
; Sequence 2, Application US/09858525A
; Publication No. US20020199215A1
; GENERAL INFORMATION:
; APPLICANT: BOETS, Annemie
; APPLICANT: ARNAUT, Greta
; APPLICANT: VAN RIE, Jeroen
; APPLICANT: DAMEE, Nicole
; TITLE OF INVENTION: No. US20020199215A1e1 Toxins
; FILE REFERENCE: 021565-077
; CURRENT APPLICATION NUMBER: US/09/858, 525A
; PRIOR FILING DATE: 2001-05-17
; PRIOR APPLICATION NUMBER: US 09/573, 872
; PRIOR FILING DATE: 2000-05-18
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
; LENGTH: 871
; TYPE: PRT
; ORGANISM: Brevibacillus laterosporus
US-09-858-525A-2

Query Match 3.4%; Score 133.5; DB 10; Length 871;
Best Local Similarity 19.2%; Pred. No. 0.11;
Matches 172; Conservative 117; Mismatches 333; Indels 275; Gaps 45;

QY 8 NKLMTLNTQRLVLSKRSKRFVTLVGVF-----LMIFALVTSWVGAKTVFGLVSSSTP 59
DB 33 SKTQOIAATTQASRDNQIDREGLLGYFKGDFNDLTLFAPTRD---NTL--IYDOOTA 86
QY 60 NAINPDSSEY---RWVG-YESYVRGHYVYKQFRAHDLRYNLE-----GSRSTQY 106
DB 87 NTLVDQKHQEHYHJIRWJIGLIQSSATGD---FTFKLSDDENAIIELDGKVISEKGNKQSY 143
QY 107 YCFNLKAFPLGSDSVKWKYKKKHGDIStKFEEDYAMSPRITGDELNOKLRAVMYNGHPON 166
DB 144 H---LEK---GQVQVQIEYQSDALHIDNKIF-----KEL--KLFIQDSQNHQO- 185
QY 167 ANGIMEGLEPLNAIRVTOEAVWYSDNAPISNPDESFKRESESNIVSTQSLSLMFOALQO 226
DB 186 -----OYOOD-----ELRNP--EFNKKETOVELKASKSKTNLFTQKTR 221
QY 227 LIDPNLATMKMPQYVDDPQSLIFESSEK-----GDKYNGYQNLSSGLVPTKPTPTPGD 280

DB 222 DIDEPTDID-GDSIFDVWMEENGTYIQNNVAAKWDLSLASKGQKFTSN---PLEKHTVGD 277
QY 281 PMPPPNPQPTTSVLLIRKVAIGDYSKLLEGATLQLTGDVNV-----SFGARVSS 329
DB 278 P-----YSDYEKARDMPLSNKKEFENPLVAAFPVAVNSLEKVIISK 319
QY 330 N-DIGERIELESDGT---YTLTE-LNSPAGYSIAEP-----ITFK----- 363
DB 330 NEDLSHVESSQSTNWSYTNTEGVNVNAGWSGLGFSFGVSANYQHSSETVANEMGSAITNDG 379
QY 364 -----VEAGKYT-----TIIDKQI-----ENPKKEIYEP--- 388
DB 380 THINGAESAYLANVRYNNVNGAILEYERKPTTTSFLIDGTITICTAKENTALTITLPOOS 439
QY 389 YSVE-----AYNDFEFS-----VLTQYVAKFYAKNNKSSQ 422
DB 440 YPEKGNKGIATNTMDDFNSRPIPLNKEQNLNTYLSNKKRPILETQVEGKYAIKDTNGNIT 499
QY 423 VVYCFNA-----DLKSPDSEDCGKTMT-----PDFTTGEVYKTHIAGRDLEFKYTVKPR 471
DB 500 IAGDNGCITDEISAKTASIIYDNGNQMEKRYAAKDYTNPEDKTPNLSVKEALKLAYPDE 559
QY 472 DTDPTPL-----KHITKVIEKGYREK-GOALIEYSGLETOLRAATQ 513
DB 560 IEKDKGLFYNDQPIFEASVQSYVDEYTAQIRKQLANDSTGSFKYKMLDYVKLEPKMANF 619
QY 514 AIYFET--DSAELEDKDLKDYH-----GFGDMNDSTLAVALILEYEAODSNPPQITDL 564
DB 620 TIKTSTLYDGGESDNTKIGNWYTYVVGNGNTGKQYRSANKGAFTELSTESKNNLKKNI 679
QY 565 DEFIIPNNKQYSLIGTOMHEDLVDIIRMEDKKEVIPPYHNLTKKT-----VTGLA 616
DB 680 DYVSLYMKADSKVS-----VD-IEIDGKQESI-VTDNITLDHVGYORINIILYPMLE 729
QY 617 GDRTKDFHFEIELEKNNKQELL---SQYVKTDKTLLEFKDGKATINLKHGSLTQGLPE 672
DB 730 GNEIN---TISIKDGQTNVMDVSVFEVGAEEIEYKDPYPOFDLIEGD-FDFFGDPL 784
QY 673 GYSY-----LVKETDSE-GYKRVNSQEVANATVSKTGITSDE-TLAFENNK 717
DB 785 AVKYHDATYFIDSPILITQTPGTFSPFYKVIQGTQTVIADSSGSKKANRINDFKKVK 841

Search completed: August 19, 2003, 15:30:28
Job time : 64 secs

